**Angular Enjoyment** Name:

Rodriguez/Geometry

**Part 1**: Find the measure of each lettered angle, and then provide the reasoning behind your work.

Reason(s):

Reason(s):

Reason(s):

Reason(s):

Reason(s):



**Part 2**: Same directions as part 1 – provide the angle measures and reasons for your solutions.



**Part 3**: Same directions as part 1 – provide the angle measures and reasons for your solutions.

a) b)

 

c) d)

 



e)

f)



g)



**Part 4**: Decide whether the statement is sometimes, always, or never true.

**You must give 1 visual example to explain yourself!**

1. The sum of the measures of two acute angles equals the measure of an obtuse angle.

2. The sum of the measures of two obtuse angles equals the measure of an obtuse angle.

3. If two angles form a linear pair, then they are complementary.

#4 through #7: Fill in the blank to make a true statement.

4. If one angle of a linear pair is obtuse, then the other is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

5. If ∠*A* ≅ ∠*B* and the supplement of ∠*B* has a measure of 22°, then *m*∠*A* =

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

6. If ∠*P* is a right angle and ∠*P* and ∠*Q* form a linear pair, then *m*∠*Q* is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.

7. If ∠*S* and ∠*T* are complementary and ∠*T* and ∠*U* are supplementary, then ∠*U* is a(n)  \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_angle.